

REMARKS

Claim 2 has been amended to address the Examiner's objection under 35 USC 112.

Claim 1 has been amended to coincide with the claim as allowed in the European Patent Office and in the German Patent Office. The pre-characterization part of amended Claim 1 is based on Beutelrock which was considered the closest prior art by the European and German Examiners.

The Examiner has rejected Claim 1 under 35 U.S.C. § 102(b) as anticipated by Cella, EP 90 303 A2, Beutelrock, DE 198 08 509 C1, and Wessel, DE 22 42 202 A.

Cella's invention relates to a reinforced masonry comprising prefabricated symmetrical slabs L, which are installed in pairs and spaced to delimit a hollow space containing the finishing concrete casting and which are provided with trellis reinforcements 2 partially projecting from a face thereof to be mutually tied by straight steel bars 4, alternatively inserted one into the other of said opposed slabs. For this purpose the zigzag rods 5, through their superposition, are apt to delimit rhomboid-sectioned corridors which are sufficiently wide to house the steel bars 4, being thus easily inserted therein depthwise (cf. page 2, lines 18-31). That means that the rods 4 are inserted during installation (see page 4, lines 15-16) at the building site. Thus, the assembler has to take care to insert along the hollow space, into special paths delimited by the rods 5 of said reinforcements, alternating in sequence those of the first slab and those of the other slab, so as to form ties apt to reciprocally engage the reinforcements of the slabs (see page 3, line 29 to page 4, line 4).

This differs from applicant's invention in that the so-called transition piece 18-20 extends rigidly and essentially horizontally in relation to the ground between the top booms 8-10 of the

lattice girders (see figure 1) whereas the connection bars 4 of Cella's arrangement cannot be considered to be a transition piece with the form and function according to applicant's invention. The transition piece of the applicant's invention has the function to produce a distance between the top booms 8-10 of the adjacent lattice girders and, by this, a distance between the concrete slabs which can be in practice more than three meters in order to realize a high static stress and stability which is, of course, very important for foundations. The number, dimension (length), and geometric conditions of the transition pieces depend mainly on the static requirements with respect to the building which has to be constructed on such reinforced concrete parts. Cella does not suggest to realize pairs of prefabricated slabs having a greater breadth. For this reason the possible static stress of Cella's part is limited in the first line by the distance between the longitudinal rod 5 and the corresponding reinforced concrete part 1 of each slab L.

Another important difference is that the applicant's transition piece 18-20 has a different orientation than Cella's bars 4, namely at right angles to the top booms 8-10 of the lattice girders and horizontally in relation to the ground when the reinforced concrete part has been placed at the building site.

A further important difference is that applicant's reinforced concrete section is formed as a single prefabricated part whereas Cella's arrangement consists of separate elements which have to be arranged and assembled on the building site only. Therefore, the correct arrangement and assembly of Cella's two part masonry requires a lot of time and care, since otherwise there may be errors (e.g. deviation) e.g. due to an uneven ground.

Cella does not anticipate applicant's amended Claim 1.

Beutelrock relates to a process for producing a two-piece prefabricated wall part. The top booms 6, 9 of its lattice girders 4, 8 are fixedly attached to each other by round steel rods 10

(see Figure 4).

This construction is different from applicant's invention because the steel rods 10 run at right angles to the top booms 6, 9 and in a vertical orientation, in relation to the ground, when the prefabricated wall part is placed on the building site. Above all, Beutelrock's construction has the disadvantage that due to the form of the round steel bars 10 and its vertical orientation there can not be realized a significant distance of the adjacent top booms 6, 9 and, in consequence, of the floor elements 3, 7. Under consideration thereof, like in the case of Cella, the maximum static stress of Beutelrock's product is very limited.

Furthermore, Beutelrock concerns a finished product for **walls**, whereas the subject matter of the applicant's application is a prefabricated part for producing **foundations** for buildings.

Beutelrock does not anticipate applicant's amended Claim 1.

Wessel relates to a device for producing reinforced concrete wall parts filled with site-mixed concrete.

Firstly, a reinforced concrete wall section being produced by Wessel's teaching is different from applicant's invention, as the connection elements 5, 6, 7 of the slabs 1 are designed in an interlocking manner, whereby these elements may be, e.g., constructed like claws or may consist of hooks and handles interacting in pairs. For this reason, Wessel does not refer to one transition piece, but to two connecting elements 5 which at most produce one transition piece that is not rigid. This construction allows the slabs to be separated after its assembling on the building site, prior to concreting, by removing the interlocking connection elements if this is desired. Consequently, in fact, Wessel's invention does not relate to a rigid connection. On the other hand the pre-cast floor elements 2, 3 according to the present invention are attached rigidly

by the transition pieces 18-20.

It follows that the reinforced concrete section according to the present invention is to be regarded as a single prefabricated part which leaves the factory as a finished product and can be used on the building site without further measures to be taken. Compared with that, the assembly of both slabs 1 to a unit, according to Wessel, is performed always on the building site only by positioning the first slab, in which thereafter the second slab is put in from above, so that the space between the slabs is then filled with site-mixed concrete (see page 4, lines 6-14 of the Wessel document).

Finally it is to be considered that Wessel relates to a reinforced concrete **wall** section whereas the subject matter of the client's application is a finished product for **foundations**, that does mean not for use in walls.

Wessel does not anticipate applicant's amended Claim 1.

The Examiner has rejected Claims 1-12 under 35 USC 103 as unpatentable over De Vore Jr. and Kim. Both De Vore Jr. and Kim teach systems for constructing building wall structures, not for producing foundations for buildings. Furthermore, De Vore Jr. and Kim differ from applicant's Claim 1 in that De Vore's "Precast modular keyed building system" and Kim's "Wall form structure and methods for their manufacture" do not comprise concrete slabs with lattice girders projecting thereof according to Claim 1. Moreover, instead of the transition piece according to the invention, De Vore Jr. teaches so-called "embedded perforated members 3, 21 (fabricated from a perforated material such as expanded steel)" (cf. Col. 4, lines 6-10) and Kim teaches so-called "connecting members 30" (cf. Col. 4, lines 14 pp.) These connection means of De Vore Jr. and Kim are provided for connection purposes and to be used by the construction

worker in a very specific manner on the building site only. De Vore Jr. and Kim do not disclose a single prefabricated part.

To accomplish De Vore's wall system all components may be handled by an individual without the use of any mechanical assistance creating a user friendly system for an average constructor (see Col. 2, lines 6-9). In the same way, Kim's prefabricated wall structure reduces construction time and saves money, because of the ease of assembly (see Col. 4, lines 7-9).

In conclusion, therefore, it is respectfully submitted that the features of amended Claim 1 are inventive over and not made obvious by De Vore Jr. and Kim, and thereby satisfy the requirements of 35 U.S.C. § 103 (a). As the pending Claims are all ultimately dependent upon Claim 1, they too should be allowable

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Respectfully,

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